

**SHOE PRESS BELT WITH SYSTEM
FOR DETECTING OPERATIONAL PARAMETERS**

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Abstract of the Disclosure

A shoe press includes: a first member; a second member; a substantially cylindrical belt; and a processing unit. The first member has a convex pressing surface. The second member includes a shoe with a concave pressing surface substantially complimentary to the convex pressing surface. The second member
10 further includes a pair of substantially circular head plates rotatably mounted on axially opposed ends thereof. The belt is fixed to, extends between, and is rotatable with the head plates such that a portion of the belt passes between the convex pressing surface and the concave pressing surface. The belt includes embedded therein a communications cable having a plurality of sensors configured to generate signals
15 responsive to an operating parameter of the shoe press. The processing unit is in communication with the communications cable and processes signals generated by the sensors. Thus, signals generated by the sensors and processed by the processing unit represent conditions (particularly pressure, nip width, temperature, strain and stress) within the nip of the shoe press that can be displayed and understood by an operator.